# Facing An Uncertain World

### Crisis Responses Puts Agencies On Path To Better Coordination



## U.S. Medicine

The Voice Of Federal Medicine

## **IHS Combines Culture, Technology**

#### By MICHAEL H. TRUJILLO, M.D., M.P.H., M.S. Assistant Surgeon General Director, Indian Health Service

#### **Innovations In Indian Health**

The Indian Health Service (IHS), an agency within the Department of Health and Human Services (HHS), in conjunction with tribal programs and governments, has delivered quality comprehensive health care services to members of federally recognized tribes for more than 50 years. Approximately 1.5 million American Indian and Alaska Native tribal members of more than 560 tribes receive a wide variety of personal and public health care services from the Indian health care system at locations all over the nation. Both urban and rural populations are served, although most members live mainly on reservations and in rural communities in 35 states, mostly in the western U.S. and Alaska.

Serving such a culturally unique and geographically dispersed population has presented many challenges to the IHS and the rest of the Indian health care system. The responses to these challenges have resulted in many innovative approaches to health care that have improved or have the potential to improve the quality and efficiency of Indian health care. Some of these innovations include developments in health care technology; the development and implementation of strong community programs targeted at the needs of specific American Indian and Alaska Native populations: the creation of many innovative collaborative and partnership efforts with private, public, and other federal organizations; and the redirecting of focus from federally-based to consultative management of health care services and resources. Through these efforts, the Indian health care system strives to embrace the technologies and innovations of the 21st century while remaining culturally grounded in the traditional values, wisdom, and heritage of the Indian people.

#### **Health Care Technology**

Implementing a sophisticated clinical information and technology program for a largely rural and geographically disparate population is crucial to the successful delivery of quality health programs to Indian communities. Networked information systems improve the continuity and quality of patient care by

allowing more efficient sharing of patient health information among health care providers, which reduces the need for duplicating costly and routine diagnostic tests and provides more reliable projections of staffing and resource needs. These information systems are also increasing health care system capabilities through the use of

innovative digital biomedical devices and telemedicine equipment that enhance providers'

performance and extend their reach to remote communities that may not have higher-level practitioners.

The IHS information technology infrastructure consists of a full range of capabilities, from storing, retrieving, aggregating, and evaluating patient medical records to transferring complex medical images through satellites to specialists in centers of excellence. The clinical information infrastructure includes the Resource and Patient Management System of more than 60 integrated patient-based administrative and clinical software programs, and the IHS National Patient Information

Reporting System, which serves as an agency-wide statistical information system, third party billing system, and warehouse of Indian health data for use by IHS providers. HIS also uses HHS-based administrative applications for fiscal and personnel information processing that operate on networked computers located at approximately 400 IHS, tribal, and urban Indian health sites and facilities nationwide.

One important area of innovation in the IHS information technology system has been in the use of telemedicine applications to overcome the difficulties

> of distance, harsh terrain, and adverse climate conditions that obstruct the flow of services. The use of telemedicine to link IHS health care specialists to remotely located patients actually began in a primitive form in the 1970s. New systems now increase access to most remote patients by specialists. Cardiac monitoring, vision degeneration

tracking in diabetic patients, x-ray and ultrasound interpretation, and telepsychiatry are some of the new clinical applications now practiced throughout the IHS system.

An example of an effective telemedicine program is the one managed by the Alaska Native Tribal Health Consortium (ANTHC), a tribally-operated P.L. 93-638 (Indian Self-Determination and Education Assistance Act, as amended), Title V program that serves over 200,000 Alaska Natives. The ANTHC oversees one of the largest telemedicine projects in the world, the Alaska Federal Health Care Access Network (AFHCAN). Since 1998, the AFHCAN has been awarded \$31 million in federal funds to connect 235 mostly



rural villages in Alaska through a statewide telemedicine system. Using state-of-the-art technology and equipment, member organizations have begun to send medical images, health information, and voice data to regional hospitals for remote diagnosis and consulting. This decreases the need for time-consuming travel over difficult terrain by patients, family caregivers, and health care providers and increases the ability to provide timely diagnoses and treatment protocols over long distances.

The ANTHC also has a teleradiology project underway that will ultimately link 10 regional hospitals throughout the state with 40 remote clinics. Not only will these sites have the ability to transmit images via teleradiology, but the sites also will be converted from film-based to completely digital systems (doing away with wet chemical processing and the need for bulky film storage facilities).

As part of our ongoing efforts to bring the best and most advanced strategies to bear on Indian health issues, the IHS is increasingly using health care technology to further our information system capacity and our providers' clinical capabilities, both essential to the care of IHS patients.

#### **Community Programs**

The Indian health care system has worked diligently to establish many innovative community-based wellness programs to address health issues in ways relevant to the local culture and targeted at local health care needs, with projects that range from small tribally-run programs to large IHS-wide initiatives.

Many tribes have local programs that link clinical services to community wellness and disease prevention activities. One example of a successful local wellness program is the Native Project, an urban Indian program in Spokane, Washington, that operates an outpatient program for substance abuse and mental health treatment for adolescents, which includes a teen parenting program. The Native Project, in conjunction with the "Medicine Wheel School," also operates a summer program for Indian children that combines sports activities, computer labs, and cultural activities with injury prevention, diabetes screening, and nutrition services.

The IHS also administers many Areawide and nation-wide community-based programs dedicated to providing health care services developed by and tailored to the local community. At the Area level, one example is the IHS Phoenix Area initiative on wellness that began in January 2001, and which has resulted in the establishment of "wellness teams" in nine local service units consisting of IHS and tribal staff. These teams develop programs and activities to address all aspects of wellness for their communities, including physical, cultural, social, emotional, intellectual, environmental, and economic.

At the national level, the IHS Diabetes Program has launched two programs: the "Model Diabetes Programs," consisting of 19 comprehensive projects located around the country that develop expertise in the prevention and treatment of diabetes for sharing with other tribes and communities, and the "Special Diabetes Program for Indians," a congressionally established network of 333 grants for multi-faceted diabetes treatment and prevention projects that rely heavily on community based efforts.. Addressing diabetes is of paramount importance to the Indian community. Diabetes is currently a leading cause of death among American Indians and Alaska Natives, and diabetes among Indian youth is increasing at an alarming rate; between 1990 and 1998, the increase in prevalence for Indians under 45 years of age was 10 times greater than for the same age group in the general U.S. population. The Special Diabetes Program for Indians grant programs and the Model Diabetes Programs, in cooperation with local community leadership, encourage physical activities and healthy lifestyles, especially among Indian youth, to reduce the devastating effects of diabetes in Indian communities. Traditional approaches to youth fitness include a "Pedaling to the Four Winds" sports camp for youth; programs that use tribal elders to teach cultural skills and healthy lifestyles to youth; the Ho-Chunk summer gardening project, and many more.

Myriad educational, nutritional, and diabetes screening campaigns are also included in the IHS Model Diabetes Program; such as a project to translate diabetes terminology into Navajo words;

nutrition classes consisting of special recipes using traditional foods; health booths set up at local PowWows to measure blood sugar levels and promote healthy lifestyles; "buffalo (the other lean meat) appreciation" dinners; and free cholesterol and blood sugar screening offered at local businesses, tribal offices, and health centers. There are also hundreds of fitness and wellness programs for all ages throughout Indian Country, with such inspirational names as Strong in Body and Spirit, Strong Women Stay Slim, Circle of Wellness, Whirling Thunder Youth Sports, Succeeding Spirit, Children of Long Life, Wellpower, and Celebration of Life. As part of the "Wellness Checked Program" in Utah, the Ute Market at Ft. Duchesne identifies low fat and sugar items with a "wellness check" on the shelves.

Other equally novel approaches are being used locally and nationally in the areas of diabetes data collection and analysis, epidemiology, nutritional counseling, incorporating traditional healing methods, diabetes prevalence and prevention research projects, clinical applications, service delivery, etc. An early screening program developed in

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1986 by IHS health care providers in northern Minnesota to lower rates of lower extremity amoutations resulted in a 75% reduction in such amputations. The approach has since been adopted as an IHS-wide "best practice model." In 1986, the IHS National Diabetes Program developed its Standards of Care for Diabetes, 2 years before the American Diabetes Association published theirs. This standardized medical record review is conducted annually and provides a means for measuring the effects of interventions and quality improvement activities at local and regional levels, as well as allowing IHS to compare its diabetes care with outside agencies and organizations. This combined clinical and public health approach to diabetes has

proven so successful that it has been adopted as a model for other federal and managed care organizations in their development of diabetes care protocols.

The development of these and other innovative community-based programs that are tailored to the needs of the local population are the backbone of the Indian health care system. They are also a reflection of the IHS commitment to listening and consulting with the people we serve in order to best craft programs that suit their diverse needs.

#### **Consultative Management**

The IHS has helped pioneer the concept of consultative management of federal functions through partnering and consulting with the people we serve. The IHS has established a working partnership with members of local health teams and communities, those most knowledgeable of the daily challenges of Indian health care, as well as with tribal governments and organizations to contribute to the decision-making process.

Throughout the year, the IHS conducts a variety of consultation forums with tribal leaders and representatives of tribal governments (national meetings, regional inter-tribal consultation sessions, meetings with delegations of leaders from individual tribes, etc.). At the national level, the IHS has created several joint IHS/tribal groups to advise on policy formulation and implementation. The Budget Formulation Team, composed of tribal and urban Indian leaders and IHS representatives, has come to play an increasingly important role in the annual formulation and prioritization of the IHS budget and health priority focus at the national and regional levels. The Tribal Self-Governance Advisory Group, composed of tribal and IHS representatives, advises IHS senior staff on issues related to tribal self-governance and self-determination. The Indian Health Care Leadership Team, composed of the senior IHS regional and headquarters staff and representatives from national Indian organizations, serves as an important advisory group on issues of operational and health related matters. The IHS has also established a performance indicator under the Government Performance and Results Act (GPRA) that is intended to determine the

satisfaction of Indian leaders with the IHS consultation process and policy.

The increased involvement of tribal and urban Indian representatives in advising and participating in the decision-making process of the agency has resulted in stronger collaborations between the federal government and tribal governments; innovations in the management of programs; effective and relevant issues brought forward for consideration by the agency, the Administration and the Congress; and reduced disparity in the political presence of tribal governments.

These are just a few examples of the innovative consultative management practices that have taken root in the IHS. These efforts to attain maximum involvement of American Indian and Alaska Native people in the programs established to serve their health needs will help to provide the highest quality services in areas where they are most needed and where they will be most effective.

#### **Collaborations and Partnerships**

The future of Indian health care requires coordinated intervention of health care services, educational systems, and economic development programs. The IHS alone cannot improve the health status of Indian people without mutually beneficial partnerships. The time of improving health with just medical interventions is gone. The belief that improvements in health services alone will mean improvements in educational achievement, employment opportunities, and economic development is not reasonable. Improvements must take place in each arena to make a difference in the lives of American Indian and Alaska Native people. To this end, the IHS has established numerous collaborative relationships with organizations outside HHS, including universities and private foundations, in addition to established partnerships with other federal and state government programs, to address these issues. Some of the private foundations include the Kaiser Family Foundation, CJ Foundation, Robert Wood Foundation. and Udall Foundation, as well as with many other private organizations. Specific examples of successful external

collaborations include many varied and innovative programs. For example, in an effort to protect the hearing of American Indians and Alaska Natives, the IHS recently joined the WISE EARS! health education campaign, a coalition of over 70 national and local organizations, both private and federal, with the goal of preventing noise-induced hearing loss through education and outreach programs that encourage the use of appropriate hearing protection devices, equipment, and practices.

In the past few years, the IHS has strengthened its internal collaborations with nearly every agency in the Department of Health and Human Services. In recent years the IHS and the Centers for Medicare and Medicaid Services (CMS) have met regularly at the senior management level to ensure close coordination of policies, foster increased state/tribal collaboration, and develop ways to improve access to care for American Indians and Alaska Natives. The establishment of a IHS/CMS Joint Steering Committee has resulted in adherence to timelines for rate negotiations, improved cost-finding practices, increased sharing of data, and coordination of payment policies. As a result of annual rate setting negotiations. the IHS receives in excess of \$400 million (FY 2001 estimate) in revenue from CMS for services provided to Medicaid, Medicare, and the State Children's Health Insurance Program (SCHIP) eligible patients. Recently, the IHS has been able to provide assistance to CMS in its efforts to improve communications with tribal and state governments in the implementation of the SCHIP, exploring alternative approaches to reimbursement. and informing Indian elders of the programs and services available to the elderly.

The IHS and the National Institutes of Health (NIH) have several ongoing innovative partnership initiatives. Especially noteworthy among these is the Native American Research Centers for Health (NARCH) project, which was established to include American Indians and Alaska Natives as participants in and beneficiaries of the research and training supported by the NIH. The initiative has two objectives – to empower tribes to influence research projects relevant to

Indian communities and to increase the involvement of American Indian and Alaska Native people in the field of medical research. Each center will have a governing board composed predominately of tribal representatives who will determine the research priorities in consultation with the communities involved.

The NIH National Institute of General Medical Sciences (NIGMS) initially provided \$2 million each year for 4 years to fund the NARCH program. However, the first round of grant solicitations produced such a high quality of innovative research proposals that the NIGMS decided to provide to the IHS an additional \$1.5 million per year for an additional 4 years starting in 2002 for new and supplemental grant proposals. Also, other NIH Institutes and Centers provided an additional \$1 million for the first year of grants, resulting in a total of approximately \$3 million being awarded to eight NARCH programs. The tribes and tribal organizations receiving first year grants for their NARCH programs included the Northwest Portland Area Health Board for programs to improve research skills for Indian health professionals and to study the use of evidence-based medicine to improve health care, and the Alaska Native Tribal Health Consortium for various research projects dealing with diabetes prevalence of disabilities in children, telemedicine, disease prevention and prevalence, and nutrition.

The Inter Tribal Council of Arizona American Indian Research Center for Health received a grant for projects involving building community capacity to develop, implement, and sustain a school wellness program. The Five Civilized Tribes (Cherokee, Chickasaw, Choctaw, Creek, and Seminole Nations) will study interventions for diabetes among children, and the barriers and facilitators to recruiting American Indians for research studies with their grant funds, while the Black Hills Center for American Indian Health will study the attitudes of Lakota Indians toward research. The White Mountain Apache Tribe will conduct

research on preventive methods for pneumococcal disease in Apache families; the New Mexico Tribal Healthcare Alliance will be studying social protective factors of tribes; and the California Indian Health Council plans to assess diabetes risk factors in American Indian youth.

Collaborations with non-HHS agencies have also continued and grown. Collaborative projects with the Departments of Veterans Affairs, Defense, Interior, Justice, Transportation, Education, Housing and Urban Development, and the Environmental Protection Agency focus on how our programs can complement each other's efforts in achieving our diverse objectives in health, education, law enforcement, business practices, and employment. All of these programs can have positive effects on health status, and improvements in the health status of individuals and communities can result in positive effects in other areas as well.

The IHS has helped institute the concept that responsibility for health care for American Indians and Alaska Natives

must include all federal agencies and programs that impact on the entire spectrum of quality of life issues. We have continually emphasized that the continued

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success of collaborations is dependent upon the embracing of the principle that responsibility for the provision of health care for Indian people is a shared responsibility with all relevant components of the Indian health system.

#### **SUMMARY**

The goal of the IHS is to ensure that comprehensive, culturally acceptable personal and public health services are available and accessible to all American Indian and Alaska Native members of federally recognized tribes.

This diverse Indian health system includes federal, tribal, and urban Indian programs. Through the use of modern information technology methods, innovative consultative management practices and collaborations, and creative community-based programs, the IHS is meeting the challenge of administering a complex array of health services for this unique and extremely diverse population. The difficulties in accessing, delivering, and maintaining quality services, while remaining a significant challenge to the limited resources of the Indian health system, are being successfully addressed with the help of modern technology, new partners, and the direct involvement and enduring spirit of the American Indian and Alaska Native people we serve.